



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/577,034	05/23/2000	James K. Guenter	M10 26373 US	3363

128 7590 05/20/2003

HONEYWELL INTERNATIONAL INC.
101 COLUMBIA ROAD
P O BOX 2245
MORRISTOWN, NJ 07962-2245

EXAMINER

VY, HUNG T

ART UNIT	PAPER NUMBER
----------	--------------

2828

DATE MAILED: 05/20/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/577,034

Applicant(s)

GUENTER ET AL.

Examiner

Hung T Vy

Art Unit

2828

-- The MAILING DATE of this communication appears on the cover sheet with the corresponding address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

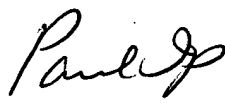
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 March 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.


PAUL IP
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 10. 6) ☐ Other:

DETAILED ACTION

1. In response to the amendment filed on 03/27/2003, claims 1-22 are pending in this application.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

3. Claims 1, 21 and 22 are rejected under 35 U. S. C. § 102 (e) as being anticipated by Jopson et al. , U.S. patent No. 6,380,533.

Regarding to claims 1, and 21, Jopson et al. disclose a polarization controlled optical energy source, comprising: a laser source (100) that produces a light output that has at least two polarization states (all the laser source have two polarization); and polarization medium (110) positioned in proximal relation to the laser source element for polarizing the light output in a third polarization state (See fig 5, 6 and column 3, line 25-40). It is inherent that at an incidence angle of the light to medium then the polarization medium is selecting and attenuate each of the at least two polarization states equally or

Art Unit: 2828

substantially equally and provide linear polarization along an axis that is at about 45 degrees to both distinct polarization states (See fig 2).

With respect to claim 22, the methods for providing a relatively constant light intensity output from a light source are considered as product by process steps.

4. Claims 1, 21 and 22 are rejected under 35 U. S. C. § 102 (b) as being anticipated by Joseph et al., U.S. patent No. 3,609,008.

Regarding to claims 1, 21 and 22, Joseph et al. discloses a polarization controlled optical energy source, comprising: a laser source (20) that produces a light output that has at least two polarization states (all the laser source have two polarization); and polarization medium (22) positioned in proximal relation to the laser source element (See fig 4) for polarizing the light output in a third polarization state (see column 3, line 48-65). It is inherent that at an incidence angle of the light to medium then the polarization medium is selecting and attenuate each of the at least two polarization states equally or substantially equally.

Claim Rejections - 35 U.S.C. § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made

Art Unit: 2828

to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Regarding claims 2-20 are rejected under 35 U.S.C. 103 (a) as being unpatentable over Jopson et al., U.S. Patent No. 6,380,533, in view of Davis et al., U.S. patent No. 6,069,905.

Regarding claims 3, 5, 8-10, 13, 14, and 20, Jopson et al. discloses a laser source element (100), a polarization medium (110), a linear polarization element, having a polarization direction (See column 6, line 35-58), but Jopson et al. does not disclose a vertical cavity surface emitting laser with a package base, a package cover. However, Davis et al. disclose a polarization controlled optical energy source with a package base (See fig 7), a vertical cavity surface emitting laser device, package cover, and polarization medium (See fig 7). It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the device of Jopson et al. to have a vertical cavity surface emitting laser with a package base, a package cover that of Davis et al., because those skilled in the art will recognize that such modification and variations can be made without departing from the spirit of, but further increasing the performance of, the invention of Jopson et al.

Regarding claims 2,6 and 7, Davis et al, disclose the source, wherein said laser source element is disposed within a component package having an emission aperture formed therein. (See column 3, lines 13, and column 3, lines 2 and fig 3).

Art Unit: 2828

Regarding to claim 4, Davis et al, disclose the source, wherein said laser source element (10) has multiple distinct polarization states oriented with respect to one another at angular intervals. (See fig 13).

Regarding to claim 11, Davis et al. disclose the source, wherein said polarization medium 39 is affixed to the component package spanning the emission aperture. See Fig 7.

Regarding to claim 12, Davis et al. disclose the source, wherein said polarization medium (39) is disposed within the component package between the vertical cavity surface emitting laser (10) and the emission aperture. (See column 5, line 33 –37 and fig 7).

With respect to claims 15-19, the methods for VCSEL polarization control are considered as product by process steps.

Citation of Pertinent References

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The patent to Park discloses Optical Head Having Two Vertical Cavity Surface Emitting Lasers With Different Wavelengths, U.S. Patent No. 5,986,998.

The patent to Johnson et al. discloses Chiral smectic Liquid Crystal Polarization Interference filters, U.S. Patent No. 5,231,521.

Art. Unit: 2828

The patent to Fossey et al. discloses Switchable Two-wavelength Frequency-converting Laser System and Power Control Therefor , U.S. Patent No. 5,361,268.

The patent to Kurata et al. discloses Pretilt Angle Measuring Method and Measuring Instrument, U.S. Patent Application Pub. No.20030071995.

Response to Arguments

Applicant's arguments with respect to claims 1-22 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Art Unit: 2828

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung Vy whose telephone number is (703) 605-0759. The examiner can normally be reached on Monday-Friday 8:30 am - 5:30pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul IP can be reached on (703) 308-3098. The fax numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



PAUL IP
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800

Hung T. Vy

Art Unit 2828

May 9, 2003